



04-11-03

FEE TRANSMITTAL

GP/1651 \$

Application Number 09/541,844

Filing Date April 3, 2000

Confirmation No. 4246

Inventor(s) Jacob S. Tou et al.

Group Art Unit 1651

Examiner Name J. Weber

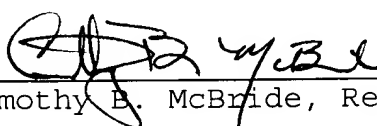
Attorney Docket Number 3108/00/US (PHA 4202.13)

RECEIVED  
APR 15 2003  
TECH CENTER 100-1000METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge the indicated fees to Deposit Account No. 19-1345.
- ☐ The Commissioner is hereby authorized to charge any additional fees required under 37 CFR 1.16 and 1.17 to Deposit Account No. 19-1345.
- ☐ Applicant claims small entity status.
2. ☒ Check Enclosed. The Commissioner is hereby authorized to charge any under payment or credit any over payment to Deposit Account No. 19-1345.

FEE CALCULATION

1. ☐ BASIC FILING FEE Subtotal (1) \$ \_\_\_\_\_  
(Type: \_\_\_\_\_)
2. ☐ EXTRA CLAIM FEES Subtotal (2) \$ \_\_\_\_\_
- Total Claims \_\_\_\_\_  
Independent Claims \_\_\_\_\_  
Multiple Dependent Claims \_\_\_\_\_
3. ☒ ADDITIONAL FEES Subtotal (3) \$ 180.00
- ☐ Surcharge - late filing fee or oath  
☐ Surcharge - late provisional filing fee or cover sheet  
☐ Extension for reply within \_\_\_\_\_ month  
☐ Notice of Appeal  
☐ Filing a Brief in Support of an appeal  
☐ Request for ex parte Reexamination  
☐ Petitions to the Commissioner  
☒ Submission of Information Disclosure Statement  
☐ Recording each patent assignment per property  
☐ Request for Continued Examination  
☐ Other: \_\_\_\_\_

TOTAL AMOUNT OF PAYMENT \$ 180.00  
Timothy B. McBride, Reg. No. 47,781April 10, 2002  
Date

TBM/sxm

Express Mail Label No. EV 246525226 US



#19  
Dm7  
7-03

3108/00/US  
(PHA 4202.13)  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Jacob S. Tou et al.  
Serial No. 09/541,844  
Filed April 3, 2000  
Confirmation No. 4246  
For

Art Unit 1651

April 10, 2003

TO THE COMMISSIONER FOR PATENTS,

SIR:

RECEIVED  
APR 15 2003  
TECH CENTER 1600/2000

**INFORMATION DISCLOSURE STATEMENT**

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicants submit copies of the references listed on the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the above-entitled application and to be made of record therein.

A check in the amount of \$180.00 is enclosed to cover the fee specified in 37 CFR §1.17(p) for submission of this Information Disclosure Statement.

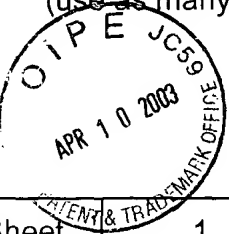
Respectfully submitted,

Timothy B. McBride, Reg. No. 47,781  
SENNIGER, POWERS, LEAVITT & ROEDEL  
One Metropolitan Square, 16th Floor  
St. Louis, Missouri 63102  
(314) 231-5400

TBM/sxm

Express Mail Label No. EV 246525226 US

04/14/2003 RHEBRIGHT 00000090 09541844 180.00 00  
01 FC:1806

<b>PTO/SB/08A</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)  				<b>Complete if Known</b>	
				Application Number	09/541,844
				Filing Date	April 3, 2000
				Confirmation Number	4246
				First Named Inventor	Jacob S. Tou et al.
				Group Art Unit	1651
				Examiner Name	J. Weber
Sheet	1	of	3	Attorney Docket No.	PHA 4202.13

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
	1	4,870,107		T. Yoshimoto et al.	09.26.1989
	2	5,013,662		A. Ben-Bassat et al.	05.07.1991
	3	5,212,091	A	J. Diaz-Collier et al.	05.18.1993
	4	5,395,763	A	R. Weinberg et al.	03.07.1995
	5	5,514,483	A	S. Sujita et al.	05.07.1996
	6	5,565,330	A	P. Atkinson et al.	10.15.1996
	7	5,573,923	A	P. Atkinson et al.	11.12.1996

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			
	8	EP	0204527 /	A1	S. Nakagawa et al.	05.30.1986	
	9	EP	0489711 /	A2	Blumberg et al.	06.10.1992	
	10	WO	8402351 /	A1	T. Christensen et al.	06.21.1984	
	11	WO	8601229 /	A1	S. Blumberg et al.	02.27.1986	
	12	WO	9829433 /	A2	S. Storrs et al.	07.09.1998	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

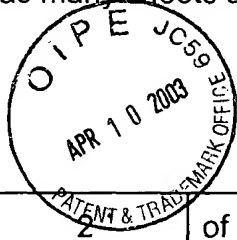
\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

RECEIVED  
APR 15 2003  
TECH CENTER 16501/16500

PTO/SB/08A		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/541,844
		Filing Date	April 3, 2000
		Confirmation Number	4246
		First Named Inventor	Jacob S. Tou et al.
		Group Art Unit	1651
		Examiner Name	J. Weber
Sheet 2 of 3	Attorney Docket No.	PHA 4202.13	



RECEIVED  
TECH CENTER 1351200  
APR 15 2003

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	13	Bachmair et al., "In Vivo Half-Life of a Protein Is a Function of Its Amino-Terminal Residue," Science 234(47):179-186, 1986.	/
	14	Bayliss, M.E. et al., "Modified Activity of Aeromonas Aminopeptidase: Metal Ion Substitutions and Role of Substrates," Biochemistry 25(24):8113-8117, 1986. Cited in International Search Report.	/
	15	Ben-Bassat et al., "Processing of the Initiation Methionine from Proteins: Properties of the Escherichia coli Methionine Aminopeptidase and Its Gene Structure," J. Bacteriology 169(2):751-757, 1987.	/
	16	Berezovsky et al., "Amino acid composition of protein termini are biased in different manners," Protein Engineering 12(1):23-30, 1999.	/
	17	Chicz et al., "High-Performance Liquid Chromatography: Effective Protein Purification by Various Chromatographic Modes," Methods of Enzymology, Volume 182, "Guide to Protein Purification", pp. 392-421, Edited by M. P. Deutscher, Academic Press, Inc., San Diego, CA, 1990.	/
	18	Grigoryev et al., "A Mouse Amidase Specific for N-terminal Asparagine; The Gene, the Enzyme, and Their Function in the N-End Rule Pathway," J. Biol. Chem. 271(45):28521-28532, 1996.	/
	19	Hermanson et al. "Activation Methods," Immobilized Affinity Ligand Techniques, 1992, pp. 51-56	/
	20	Kennedy, R.M., "Hydrophobic Chromatography," Methods of Enzymology, Volume 182, "Guide to Protein Purification", pp. 339-343, Edited by M. P. Deutscher, Academic Press, Inc., San Diego, CA, 1990.	/
	21	Kitazono, A., et al., "Isolation and characterization of the prolyl aminopeptidase gene (pap) from Aeromonas sobria: comparison with the Bacillus coagulans enzyme," J. Biochem (Tokyo) 116(4):818-825, Oct 1994	/
	22	Prescott, J.M., et al., "Aeromonas Aminopeptidase," Methods in Enzymology 1976, 45:530-543.	/
	23	Prescott et al., "One Hundred Fold Increased Activity of Aeromonas Aminopeptidase by Sequential Substitutions with Ni(II) or Cu(II) Followed by Zinc," Biochem. Biophys. Res. Comm. 114(2):646-652, 1983.	/
Examiner Signature	Date Considered		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

PTO/SB/08A		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/541,844
		Filing Date	April 3, 2000
		Confirmation Number	4246
		First Named Inventor	Jacob S. Tou et al.
		Group Art Unit	1651
		Examiner Name	J. Weber
Sheet 3 of 3	Attorney Docket No.	PHA 4202.13	

24	Rossomando, E.F., "Ion-Exchange Chromatography," Methods in Enzymology, Volume 182, "Guide to Protein Purification," pp. 309-317, Edited by M. P. Deutscher, Academic Press, Inc., San Diego, CA, 1990	
25	Stellwagen, E., "Gel Filtration," Methods in Enzymology, Vol. 182, "Guide to Protein Purification," pp. 317-328, Edited by M. P. Deutscher, Academic Press, Inc., San Diego, CA, 1990	
26	Stewart et al., "The Sequence of Porcine Protein NH <sub>2</sub> -terminal Asparagine Amidohydrolase; A New Component of the N-End Rule Pathway," J. Biol. Chem. 270(1):25-28, 1995.	
27	Varshavsky, A., "The N-End Rule," Cell 69:725-735, 1992.	
28	Varshavsky, A., "The N-end rule: Functions, mysteries, uses," Proc. Nat'l. Acad. Sci. USA 93:12142-12149, 1996.	
29	Weinberg et al., "A chromosomal expression vector for <i>Escherichia coli</i> based on the bacteriophage Mu," Gene 126:25-33, 1993.	
30	Wilkes et al., "Specificity of <i>Aeromonas</i> Aminopeptidase toward Oligopeptides and Polypeptides," Eur. J. Biochem. 34(3):459-66, 1973.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.